03/15-932

Canon

EOS 600

Power Eye Autofocus SLR

INSTRUCTION BOOK
English edition

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INTRODUCTION

Thank you for purchasing the Canon EOS 600, an autofocus and auto exposure SLR camera designed with the most advanced electronic and computer technology.

The EOS 600 features a dedicated EF lens with a built-in motor, a newly-developed distance metering sensor (BASIS; base-stored image sensor) and a high-speed super microprocessor, all combined to offer accurate and fast focus. Its Predictive Focus control captures high-speed subjects even when coming head-on. The built-in motor drive lets you take approximately 5 frames per second for continuous shooting.

Other advanced functions include Programmed Image Control that sets controls for 7 types of photos, and Custom Function Control that lets you re-program 7 operations to your individual preference.

Please read this manual carefully for a full understanding before using the camera.

Important information

The Canon EOS 600 will give optimum performance together with specially designed Canon EF lenses, flash units and other Canon brand accessories. It is possible that the use of incompatible lenses or other accessories may result in unsatisfactory performance or damage to your Canon EOS 600. We, therefore suggest the use of Canon EF lenses and accessories. Damage to your camera, as a result of malfunction or improper connections caused by the use of incompatible products may void the product warranty.

NOMENCLATURE

LCD Display Panel

Electronic Input Dial

Shutter Button

Grip/
Battery Cover

Self-timer Operation
Indicator (LED)

Distance Index

Manual Focusing Ring

Accessory Shoe

Main Switch

Film Plane Indicator

Exposure Compensation Button

Shooting Mode Selector

Neckstrap Fixture

Back Cover Lock Button

Back Cover Latch

Focus Mode Switch

Lens Release Button

Depth-of-Field Check Button

Manual Aperture Set Button

1. Film Rewind Button
2. AF Mode Selector
3. Film Winding Mode Selector
4. Battery Check Button

Depth of Field Check:
By pressing the depth of field check button.
LCD Display Panel:
Displays only the information required at the time, e.g. shooting mode, film winding mode, AF mode, shutter speed, aperture value, film speed, or battery check. Timer function for 6 sec. is provided; the display is held on for 6 sec. after the switch i.e., shutter button is pressed. Can be illuminated by electro luminescense.
Custom Functions:
Built-in, seven kinds.
Power Source:
One, six-volt lithium battery pack (2CR5). Battery is replaced by removing grip.
Battery Check:
By pressing the battery check button. Three energy levels are shown by the battery check bar marks in the display panel.
Back Cover:
Interchangeable. Opened by sliding the latch with safety lock. Quartz Date Back E and Technical Back E can be attached.
Dimensions:
148 (W) × 108.3 (H) × 67.5 (D) mm.
Weight: 660 g (body only).

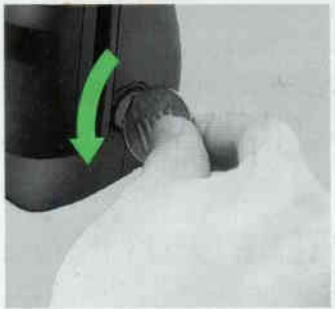
(All data are based on Canon's Standard Test Method.)

Subject to change without notice.

*P*RELIMINARY PREPARATIONS AND OPERATION AT THE STANDARD POSITION

LOADING THE BATTERY

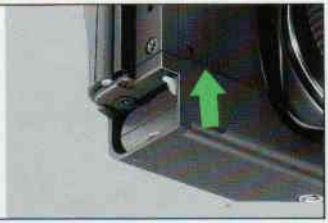
This camera uses one, six-volt lithium battery pack 2CR5.



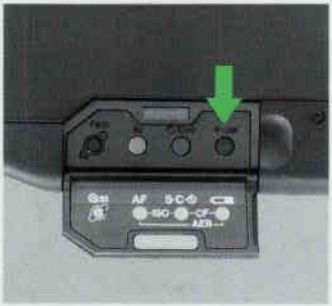
1) Remove the grip with a coin or similar object.

2) As shown in the photo, load the battery so that its terminals face in the direction of the camera. Make sure the battery is pushed in all the way until it is locked by the orange lever.
3) Replace the grip securely.

- When replacing the battery, first push the orange lever up.
- When using a tripod, dismount the camera before replacing the battery.



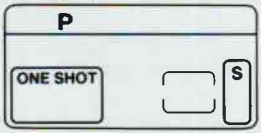
CHECKING THE BATTERY

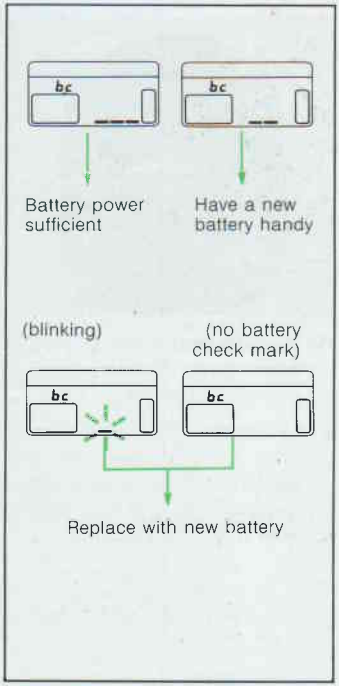


1) Set the main switch to the green "□", "A" or "((•))" mark. The display will come on at this time. If the display does not appear, confirm that the battery is loaded correctly.

2) Open the switch cover and press the battery check button (▭). Battery power shows in the display panel.

(example)





ATTACHING THE LENS

1) Turn the rear lens cap in the direction of the arrow until it stops and remove it.

- To attach, align its "◯" mark with the red dot on the lens. Then lightly push it in, and turn clockwise until it stops.

2) Turn the body cap counterclockwise and remove it.

- To attach, align its "◯" mark with the camera's red dot, then turn the cap clockwise.

3) Next, align the lens mount positioning point with the camera's red dot.

4) Then turn the lens clockwise until it stops and the lens is locked with a click.

- To remove the lens, turn it counterclockwise while pressing the lens release button.

5) Remove the front lens cap.

6) Slide the lens focus mode switch to "AF".

CAUTION

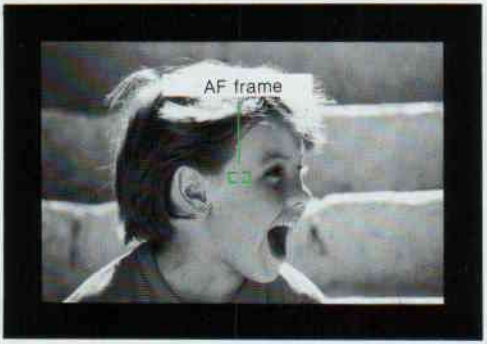
- The electronic contacts must be clean for proper connection. Do **not** touch these contacts.
- Be sure to place the lens' front end down to avoid damaging the electronic contacts.

HOLDING THE CAMERA

Your pictures will not be sharp if the camera moves as the shutter button is pressed. To avoid this, try the following technique:

1) Hold the camera firmly, with your left hand supporting the camera and lens.
2) Keep your left elbow close to your body.
3) Lightly hold the camera against your cheek or forehead and look into the viewfinder.
4) Spread your feet about shoulder width for a steady, natural stance.

AF FOCUSING



1) Center the AF frame "⊏ ⊐" over the main subject.

2) Press the shutter button halfway and automatic focus (AF) starts. When correct focus is obtained, the green AF symbol lights up in the viewfinder and the AF signal (short beeper tone) sounds. Press **completely** to take the picture.

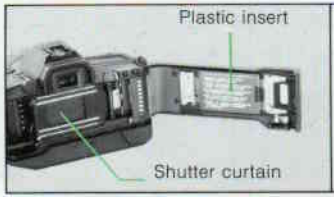
- Shutter button action plays an important part in taking sharp pictures. A quick stroke with the tip of your finger or fingernail may cause camera shake.
- When AF is impossible, the green AF symbol will start blinking and the shutter will not release (see pp. 26 to 27).

LOADING THE FILM

1) Push the back cover latch down while pressing the back cover lock button.

2) Insert the upper-flat end of the film cartridge into the film chamber first. The film-load check mark (◎) appears in the display panel.

3) Pull the film leader across the shutter curtain until its tip is aligned with the orange mark.
4) Close camera back and film is automatically to frame. (Blinking bars on the LCD panel indicate "re-loading".)



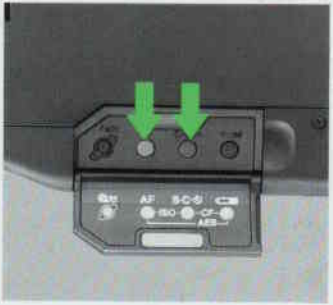
CAUTION

- Before loading the first roll of film, remove the plastic insert.
- NEVER touch the shutter curtain. Its high-precision design makes it sensitive to pressure. Also, when loading the film, be careful that the film leader does not touch the shutter curtain.

MANUAL FILM SPEED SETTING

The camera automatically sets film speed by sensing the DX code marked on the film cartridge. (ISO 25–5000 according to the DX code.) The automatically-set film speed will appear in the display panel while the film advances to the first usable frame. When using film without a DX code, set the speed manually by following these steps: (ISO 6–6400).

1) Set the main switch to either "A" or "((•))".



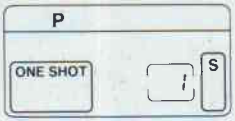
2) Open the switch cover, and press both the blue and yellow buttons at the same time to display the ISO film speed number.

3) Turn the electronic input dial until your film speed appears.

- The previously-set film speed blinks if the film speed has not been set. The warning stops after correct film speed setting.

STANDARD (FULL-AUTO) POSITION

1) Set the camera's main switch to the green mark "□". The following displays will appear:

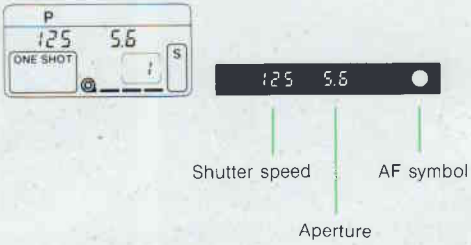


2) Center the AF frame "[ ]" over the subject.

If "**P**" is blinking in the display panel, press the shooting mode selector and turn the electronic input dial until "1" appears on the LCD panel.

3) Press the shutter button halfway to focus the subject, and gently press the shutter button completely to take the picture.

Correct exposure display (example)



- Once the shutter button is pressed halfway, the display is held on for approximately six seconds.
- When the automatically-set shutter speed is too slow to hand-hold, the camera-shake warning sounds (long beeper tone). We recommend using a tripod or a flash.

FOCUS LOCK

When your subject isn't in the center of the picture frame, use the focus lock function. Focus on the intended subject remains locked **as long as the shutter button is held halfway.** This function lets you vary composition by putting the subject off-center.

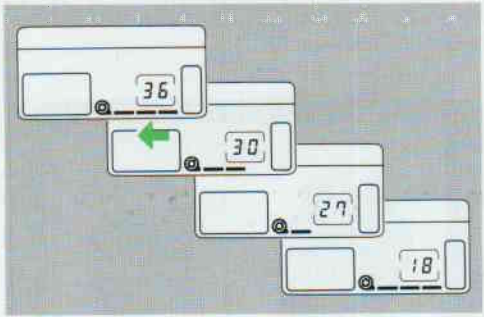
1) Put the AF frame over the subject, and press the shutter button halfway to lock focus. Make sure the green AF symbol lights up.

2) Reframe the picture as desired **while pressing the shutter button halfway.** Then press the shutter button completely to take the picture.

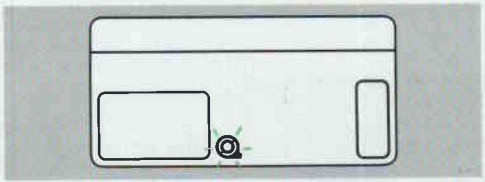
- When using focus lock, be sure that the distance between you and the subject does not change.
- Focus lock clears when you remove your finger from the shutter button.

AUTOMATIC FILM REWIND

The film automatically rewinds at the end of the roll.



1) During rewind the film transport bars move in sequence from right to left to indicate the function in progress while the frame counter counts in descending order.



2) Film rewind stops automatically when the film has been **completely** rewound. Open the back cover when the film-load check mark (◎) blinks and remove the cartridge.

Rewinding Mid-Roll

Press the film rewind button (◎◂) to rewind before the roll ends. The function begins immediately.

PROGRAMMED IMAGE CONTROL (P.I.C.)

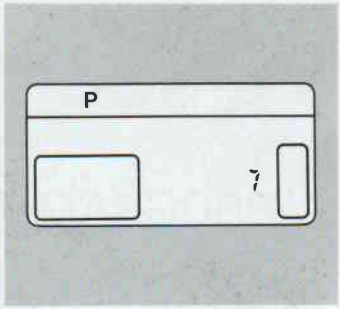
P1 Standard
P2 Quickshots
P3 Landscapes
P4 Sports
P5 Portraits
P6 Close-ups
P7 Indoor

Labels in several languages are provided. Please attach the one that you choose on the back cover.

PROGRAMMED IMAGE CONTROL (P.I.C.)

1) Set the main switch to the green mark.

2) Hold the shooting mode selector down, and turn the electronic input dial.



3) A number corresponding to the P.I.C. photo will appear in the display panel. The number increases as the dial is turned. Select the desired number and release the shooting mode selector.

The P.I.C. number disappears after setting, press the shooting mode selector to recall the number.

When using P.I.C., "P" will blink **continuously** at all settings from # 2–7. This is **not** an indication of malfunction, but a reminder that # 1, standard is not in use.

P2 Quickshots

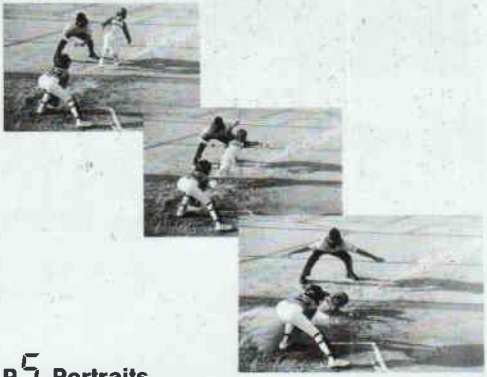
Use this setting for lively candids of your family, pets, and when outdoors. Be sure to try various angles for more variety and a different look at your subjects.

P3 Landscapes

Mount a wide-angle lens and watch the camera's position to keep everything in the viewfinder in sharp focus.

P4 Sports

Use a telephoto lens to capture the action and zero in from safe distances. Hold the shutter button halfway and keep the autofocus mark on the subject while tracking the action.



P5 Portraits

Attach a telephoto lens and move in as close as possible to fill the frame with the subject's upper body. Place the subject in flattering lighting. Focus on the subject's eyes and keep the background blurred. Keep the shutter button pressed completely to take pictures continuously.

P6 Close-ups

Close-up photos of flowers, insects and subject detail are easy at this setting. Be aware of your lens' closest focusing distance for sharp photos.

P Indoor

Attach the EOS Speedlite 420EZ or 300EZ to illuminate the subject when the lighting dims. Be sure to keep within the flash shooting distance range for proper coverage.

Set the flash's main switch to the " ▌ " mark.

Display Panel Illumination

Press the display panel illumination button to illuminate the display panel for approximately six seconds.

- To turn off the illumination within six seconds press the display panel illumination button again.

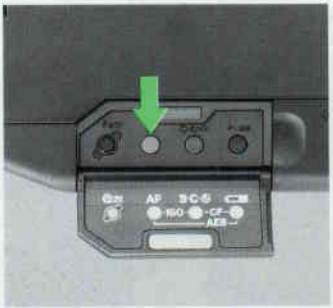
SETTING THE AF MODE

ONE SHOT: Normal set position. The lens stops moving once focus has been obtained. As long as the shutter button is kept pressed halfway, the original focus and exposure remain locked.

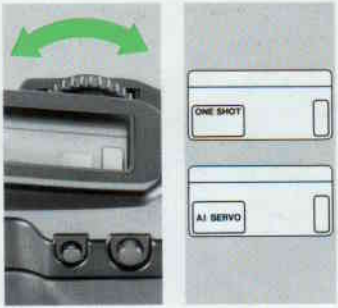
- The shutter releases only after AF completion.

AI SERVO*: The lens continues to rotate, refocusing every time the focusing distance changes. Use this mode to follow a moving subject. Exposure is determined at the moment of shutter release.

- The shutter releases even if autofocus has not been completed.



1) Open the switch cover and press the AF mode selector.



2) Turn the electronic input dial to select either "ONE SHOT" or "AI SERVO".

AF symbol does not light up and AF signal does not sound in AI Servo mode.

* In AI Servo AF mode, new Focus Prediction tracks moving subjects accurately to keep images in sharp focus. Activated automatically, it anticipates the subject's speed and distance. Focus constantly adjusts from the moment the shutter button is pressed to the point of exposure.

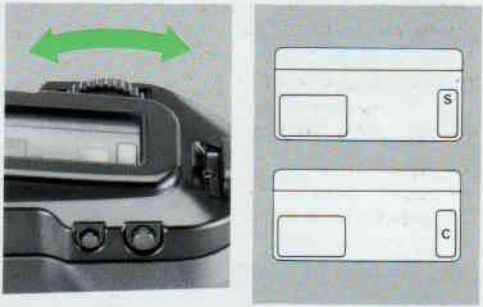
SETTING THE FILM WINDING MODE

S: Single exposure. The film automatically advances to the next frame upon shutter release.

C: Continuous exposure. Keep pressing the shutter button and the film winds continuously at the maximum speed of approximately five frames per second. (Approx. 2.5 frames with AI Servo.)

⏲: Self-timer position.

1) Open the switch cover and press the film winding mode selector.



2) Turn the electronic input dial to set either "S" or "C" in the display panel.

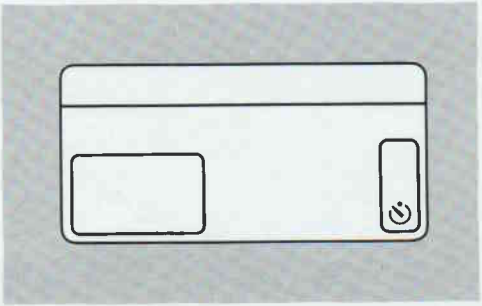
SELF-TIMER PHOTOGRAPHY

The self-timer allows you to delay shutter release for ten seconds and get into the picture.
Put the camera on a table, tripod, or other flat surface.

1) Set the main switch to either "A" or "((•))".

2) Open the switch cover and press the film winding mode selector.

3) Turn the electronic input dial until "⏲" mark appears in the display panel.



4) Focus your subject, compose the picture and then press completely the shutter button. The self-timer operation indicator will start blinking.

- The shutter automatically releases ten seconds after being pressed. Two seconds before shutter release, the indicator starts blinking faster.
- To cancel the self-timer before shutter release, press the battery check button.
- Do not stand in front of the camera when you press the shutter button.

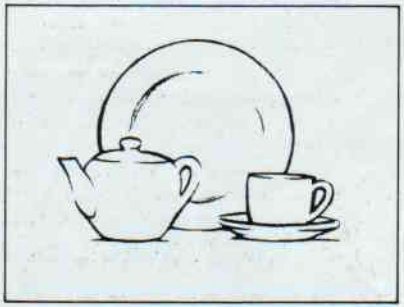
In self-timer photography, use the finder cover to prevent stray light from entering.

1) Slide the eyecup up to remove.
2) Attach the viewfinder cover.

DIFFICULT SUBJECTS FOR AUTOFOCUS

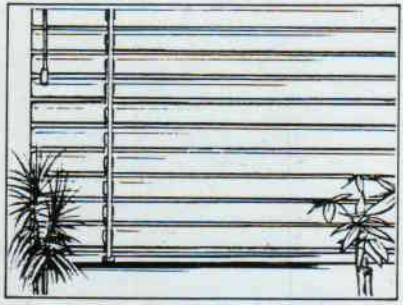
Although the AF system of the camera is very accurate, it is not perfect. The following subjects are difficult for autofocus. When AF is impossible, the green AF symbol will blink in the viewfinder.

Subjects
• Low contrast subjects (misty scenes, light-colored or white objects) ..... (A)
• Subjects having generally horizontal patterns (window blinds) ..... (B)
• Subjects in extremely strong backlight with strong reflections
• Subjects with an object in front of them (caged zoo animals) ..... (C)
• Fast-moving subjects (difficult to keep within the AF frame)



(A)

(B)



(C)

Focus these subjects as follows:

1. Autofocus a substitute subject at the same distance from the camera as your main subject, and then recompose the picture ... (A)
2. Hold the camera vertically and focus the subject using autofocus then recompose the picture ..... (B)
3. Manually focus the subject following the steps on the next page.

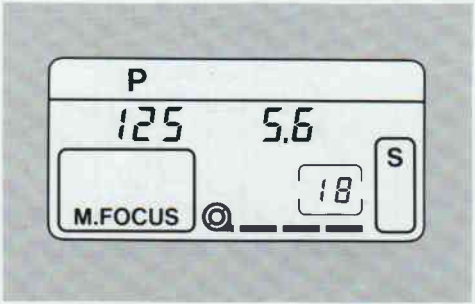
MANUAL FOCUSING

1) Slide the lens focus mode switch to "M".

- The panel display automatically changes to "M.FOCUS" and the AF mode cannot be set.

2) Turn the lens manual focusing ring and focus your subject using the matte-surface until it is sharp.

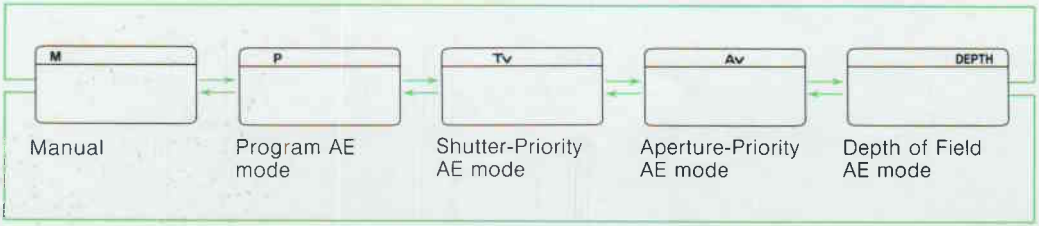
- The subject is in focus when the image is not fuzzy.
- Some EF lenses are not provided with a manual focusing ring.



*M*AKING THE MOST OF
YOUR EOS 600

SETTING THE SHOOTING MODE

To set the shooting mode first set the main switch to "A" or "((•))", then press the shooting mode selector while turning the electronic input dial until the desired mode appears. (The display moves in the sequence below.)



PROGRAM AE

The camera selects the ideal program according to the characteristics of the lens in use.

- When both values blink, exposure is incorrect. Use a Neutral Density filter in bright settings and switch to flash photography in dark settings.

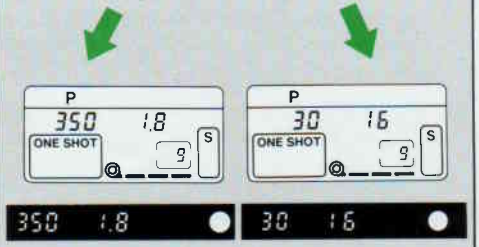
PROGRAM SHIFT FUNCTION

You can change the automatically-set shutter speed/aperture combinations of the program AE mode. This function is particularly useful when you need a specific shutter speed or aperture while shooting in the program AE mode.

- After one shot, the program shift function automatically clears.
- The program shift function cannot be used in flash photography.
- For further information on the program shift characteristics, please see p. 61.

Example:
Displays when the shutter button is pressed halfway.

Turn the electronic input dial.



SHUTTER-PRIORITY AE

In this mode the shutter speed is user set and the camera automatically chooses the correct aperture for the lighting conditions.

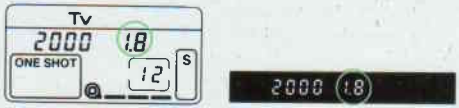
Set the shutter-priority AE mode following the steps on p. 30. The initial shutter speed setting is always 125 (1/125).
Turn the electronic input dial for the desired shutter speed.

Shutter speed display

			2000	1500	1000	750	500	350			
250	180	125	90	60	45	30	20	15	10	8	6
4	3	2	0"7	1"	1"5	2"	3"	4"	6"	8"	
10"		15"	20"	30"							

The "camera-shake" warning does not sound in shutter-priority AE.

Viewfinder information



Underexposure – The lens maximum aperture starts blinking. Turn the electronic input dial and set a slower shutter speed until the maximum aperture stops blinking.

Overexposure – The lens minimum aperture starts blinking. Turn the electronic input dial and set a faster shutter speed until the minimum aperture stops blinking.

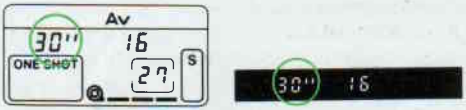
APERTURE-PRIORITY AE

In this mode, the aperture is user set and the camera chooses correct shutter speed for the lighting conditions.

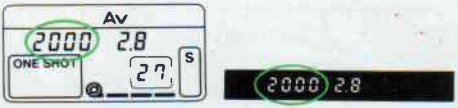
Set the aperture-priority AE mode following the steps on p. 30. The initial aperture value setting is always 5.6 (f/5.6).
Turn the electronic input dial for the desired aperture value.

When the automatically-set shutter speed is too slow to hand-hold, the camera-shake warning sounds. We recommend using a tripod.

Viewfinder information



Underexposure – The shutter speed of 30" starts blinking. Turn the electronic input dial and set a larger aperture until 30" stops blinking.



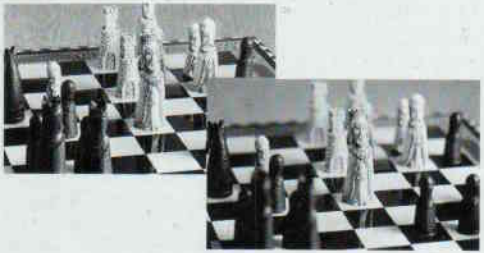
Overexposure – The shutter speed of 2000 starts blinking. Turn the electronic input dial and set a smaller aperture until the shutter speed stops blinking.

DEPTH OF FIELD

When your subject is in focus, there is a certain area in front of it and behind it which will also be in focus. This range of sharpness is called "depth of field".

Depth of field has the following characteristics:

1) The smaller the aperture, the wider the depth of field and vice versa.
2) The shorter the lens focal length is, the greater the depth of field, provided that aperture and shooting distance are the same.
3) The farther the shooting distance, the greater the depth of field.
4) Depth of field is generally greater in the background than the foreground.



Checking the depth of field

Push the depth of field check button and the camera will stop-down the aperture to either the automatically-calculated value (e.g. shutter-priority AE), or the one set manually (e.g. aperture-priority AE). As you look through the viewfinder with the button pushed in, you can see the range of sharpness, i.e. the depth of field.

It is impossible to check depth of field when the main switch is set at the green "□" mark.

DEPTH OF FIELD AE

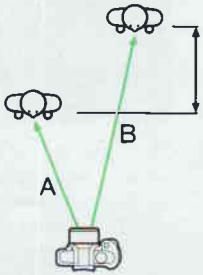
This mode makes everything from a certain point in the foreground to the background in focus. The camera automatically sets the correct aperture value and corresponding shutter speed for the lighting conditions.

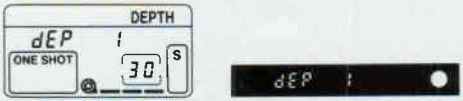
Depth of Field AE cannot be used with a flash.

1) Put the AF frame over the first point (A), the foreground, and press the shutter button halfway.

2) Remove your finger when the AF symbol lights up.

3) Repeat steps #1 and #2 for the second point (B), the background.





The display after the first "A" point is focused.

The display after the second "B" point is focused.

4) Reframe the picture and press the shutter button halfway. The "●" lights up, and the correct aperture value and corresponding shutter speed are displayed. Gently press the shutter button completely to take the picture.

When shooting continuously, it is not necessary to focus the same subject again provided you keep pressing the shutter button halfway after exposure. (To clear, press the shooting mode selector after you remove your finger from the shutter button.)

Viewfinder information

If it is impossible to get the distance range in focus, the lens minimum aperture value will start blinking. Exposure, however, will still be correct and you will get the best results under the existing shooting conditions.

Helpful Hints

1. Move back from the subject and follow steps 1 through 4 again. If the minimum aperture stops blinking, the distance range will be in sharp focus and the exposure will be correct.
2. Use a wide-angle lens (or wide-angle side when using a zoom lens) and follow steps 1 through 4 again. If the minimum aperture stops blinking, the distance range will be in sharp focus and the exposure will be correct.
3. Depth of field will be shallow if two points are focused at the same shooting distance. A telephoto lens is recommended for portraits in order to strengthen the shallow effect.

- When both values blink, exposure is incorrect. Use a neutral density filter in bright settings.
- When you try to focus extremely near and far points, the automatically-set shutter speed will be comparatively slower and the long beeper tone will sound to warn you of camera-shake. Hold the camera steady or use a tripod.
- When using a zoom lens, do not change the lens' focal length after focusing the first point. Always be sure to compose the picture first.
- Press the shooting mode selector to clear the depth of field AE while operating.

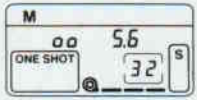
MANUAL OVERRIDE

This creative mode allows you to control exposure by setting both the shutter speed and aperture. Set the manual exposure mode following the steps on p. 30. The initial setting is always 1/125 sec. at f/5.6.

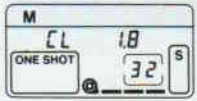
1) Turn the electronic input dial to set the desired shutter speed.

2) Press the manual aperture set button. At this point, "OP", "oo", or "CL" lights up instead of the shutter speed. The meaning of each display follows:

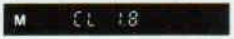
OP: underexposure
(OPen the aperture)



oo: correct exposure



CL: overexposure
(CLose the aperture)



While pressing one of the two buttons, turn the electronic input dial until "oo" displays. The corresponding aperture value displays.

- Set a slower shutter speed if "OP" remains lit when the electronic input dial is turned to the lens' maximum aperture.
- Set a faster shutter speed if "CL" remains lit when the electronic input dial is turned to the lens' minimum aperture.

The camera-shake warning does not sound in the manual mode.

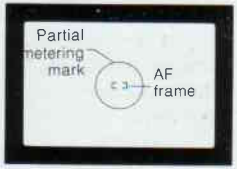
PARTIAL METERING

Use this mode, for stage photography, or when there is a big difference in brightness between the main subject and the background.

- The partial metering mode can be used regardless of the camera's mode, except when the main switch is set to the green mark position (□).
- The partial metering area is approximately 6.5% of the picture area.
- The AE lock mechanism automatically works in the partial metering mode.

AE lock
The original exposure value remains locked as long as the shutter button is pressed halfway, so even if you recompose the picture, correct exposure on the main subject will not be affected by changes in lighting conditions.

1) Cover the main subject with the partial metering mark and press the shutter button halfway.



2) While pressing the shutter button halfway, press the partial metering button. (In manual override, however, press the partial metering button while pressing the manual aperture set button.) A green asterisk ("✳") appears in the viewfinder.

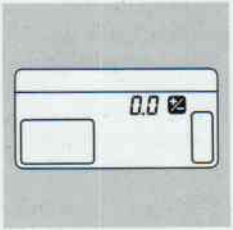
- You can remove your finger from the partial metering button if you keep pressing the shutter button halfway.

3) Compose the picture while continuing to hold down the shutter button, then press the shutter button completely to take the picture.

EXPOSURE COMPENSATION

Use exposure compensation for high-key (intentionally overexposed) or low-key (intentionally underexposed) shots. The range of exposure compensation is up to ±5 steps in 1/2-step increments.

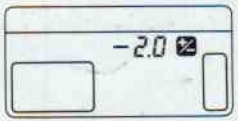
- "+" means increasing exposure while "–" means decreasing exposure.
- Exposure compensation can be used regardless of the metering or shooting mode, except when the main switch is set to the "□".



1) Press the exposure compensation button and "0.0 +/–" appears in the display panel.

+1.5 steps of compensation applied

2) While pressing the exposure compensation button, turn the electronic input dial to the desired exposure compensation value.



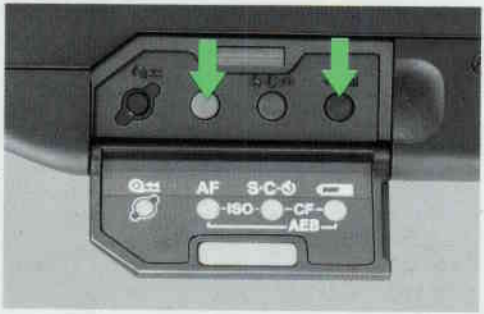
–2.0 steps of compensation applied

3) Remove your finger from the exposure compensation button.

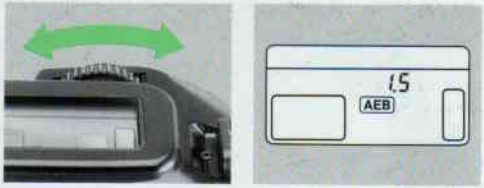
- The "+/–" mark indicating exposure compensation status appears in the viewfinder and in the display panel.
- Reset the amount of compensation to "0.0 +/–" otherwise, subsequent frames will be incorrectly exposed.

AUTO EXPOSURE BRACKETING

Use auto exposure bracketing when you want to vary the best exposure of the same scene by changing the amount of exposure on film intentionally. The range of bracketing is up to ±5 steps in 1/2-step increments. (This mode cannot be used in flash photography.)



1) Open the switch cover and press both the AF mode selector and battery check button simultaneously to display the 0.0 and "AEB" indicating auto exposure bracketing.



2) Turn the electronic input dial to the desired bracketing value.

- If you set 1.5 in the display panel, for example, the camera automatically makes three continuous exposures in sequence of –1.5 step of underexposure, correct exposure according to the camera's meter and +1.5 step of overexposure.

3) Three continuous exposures are automatically made regardless of the film winding mode.

- Auto bracketing will remain set until cleared. To clear auto exposure bracketing, display the "AEB" and preset bracket value again by following step 1), then turn the electronic input dial until the bracket value returns to 0.0.

Sample photos:

–1.5 step of compensation used

± 0 step of compensation used

+ 1.5 step of compensation used

Helpful Hints

If you wish to shift your bracketed exposure value toward overexposure, you can combine the exposure compensation with the auto exposure bracketing.

Example:

If you wish to bracket at 0.5 step, 1.5 step and 2.5 step:

1) Set the auto exposure bracketing (AEB) value to 1.0; this will give –1.0 step, 0, + 1.0 step.
2) Set the exposure compensation value to + 1.5. This will shift all exposures up 1.5 step.

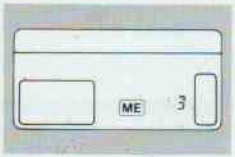
The bracketed value will be + 0.5 step, + 1.5 step, + 2.5 step.*

* – 1.0 (AEB) + 1.5 (EX) = + 0.5
0 (AEB) + 1.5 (EX) = + 1.5
+ 1.0 (AEB) + 1.5 (EX) = + 2.5

MULTIPLE EXPOSURES

The EOS 600's multiple exposure function allows you to take two or more exposures on the same frame for a creative effect. A maximum of nine exposures on the same frame can be done with the simple operation of the electronic input dial.

1) Press both the shooting mode selector and the exposure compensation button simultaneously. The "ME" mark indicating multiple exposure status will then appear in the display panel and the frame counter will become "1".



2) While pressing both turn the electronic input dial to the desired number of exposures. For example, set "3" on the frame counter if you want to make three exposures on the same frame.

- While shooting, the "ME" mark will blink to indicate the camera is in the multiple exposure status.
- After the preset number of exposures have been completed, the film automatically advances to the next frame.

Clearing Preset Exposures

Before shooting

Follow steps ≠1 and ≠2 and turn the electronic input dial to return the frame counter to "1".

While shooting

The operating procedures are basically the same as mentioned above, but turn the electronic input dial until the frame counter is blank.

Exposure Compensation

It is necessary to correct the exposure depending on the situation because the same frame is exposed several times.

Number of exposures	Exposure Compensation (Guideline)
Double	−1.0
Triple	−1.5
Quadruple	−2.0

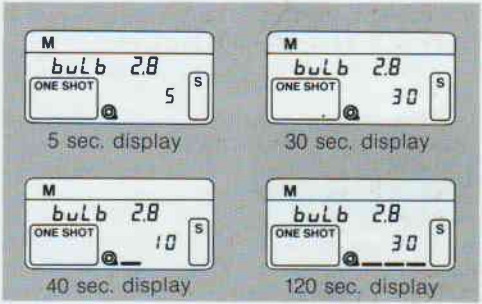
Notes

1. It is not advisable to make multiple exposures on the first or last several frames due to possible film curl which may adversely affect image registration.
2. Generally, the first exposure of a series should be a relatively dark subject so that the image in the next exposure will show up clearly.
3. When using print film, please inform the developer that you have taken multiple exposures, or your photos may be processed incorrectly.

BULB (LONG EXPOSURE)

Use the bulb mode for exposures longer than 30 seconds like astro or night photography.

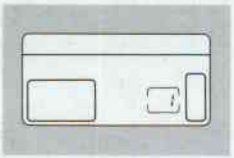
1) Set the shooting mode to "M".
2) Turn the electronic input dial until "buLb" (next to 30") displays.
3) Set the aperture value by turning the electronic input dial while pressing the manual aperture set button.



- The camera requires relatively little power in the bulb mode saving battery usage.
- Bulb operation time displays by a series of three bars and numbers from 1 to 30. Each bar mark indicates 30 seconds. Maximum exposure time display is 120 seconds (three bars and 30).
- Bulb cannot be used with auto exposure bracketing.
- Use the Technical Back E to control the exposure time within a period of 23 hr. 59 min. 59 sec. (available optionally).
- Use a tripod, Remote Switch 60T3 and Grip GR20 (available optionally) when taking long exposures.
- There is no exposure warning in the bulb mode.

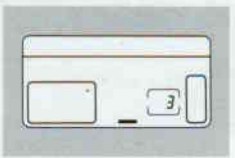
CUSTOM FUNCTION CONTROL

This versatile, new control lets you program seven functions to **your** individual preference.



1) Press the film winding mode selector and battery check button at the same time. The control number appears in the frame counter.

2) Turn the electronic input dial in either direction to set the desired control.



3) Press the partial metering button to finish. A bar mark appears to confirm setting. To cancel a custom function press the partial metering button again.

- To cancel a control and return to normal function, repeat the above steps. The bar disappears.

Set the main switch to "A" or ((•)) At the green mark, "□" controls ≠ 4, 5, and 7 cannot be used.

CUSTOM FUNCTION CONTROL CHART

	CONTROL		USER-SELECTED OPERATION	NORMAL OPERATION
1	Film rewind cancellation		Cancels automatic film rewind operation	Film rewind starts automatically at end of roll
2	Film leader out		Leaves the film leader outside the cartridge	Film leader completely rewound into cartridge
3	Film speed set		Cancels automatic film speed setting of DX-coded film	Film speed set by camera according to DX-code
4	Autofocus start		Initiates autofocus by pressing partial metering button. Partial metering is still activated as long as this button is depressed	Autofocus starts when shutter button pressed halfway
5	Manual exposure	Aperture	Set by electronic input dial operation only	Set by manual aperture set button or display panel illumination button + input dial
		Shutter speed	Set by manual aperture set button or display panel illumination button + input dial	Set by electronic input dial operation only
6	Camera shake warning tone cancellation		Turns off camera-shake warning tone	Tone sounds automatically with main switch at "□" or ((•))
7	Manual focus operation with USM lenses		Allows manual focus adjustment after autofocus without prior setting	Manual focus adjustment possible by setting focus mode switch on USM lenses

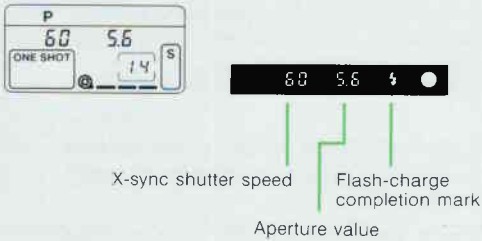
Speedlite 420EZ

Speedlite 300EZ

Use the Canon Speedlites 420EZ and 300EZ as fill-in flash in outdoor settings as well as for normal flash when shooting at night or in a dimly-lit room. These units feature a built-in AF auxiliary light function for dark situations, so you can perform AF flash photography.

Fill-in flash:
This technique utilizes a flash unit as an auxiliary light to prevent subject underexposure in backlit situations. Generally, the exposure level between the main subject illuminated by the flash and the background in ambient light must be balanced to avoid unnatural effects. With the Canon Speedlites 420EZ and 300EZ there is no need to balance this exposure level because it is automatically controlled.

Upon flash charge completion in the Program AE mode, the aperture value and the X-sync shutter speed are automatically set. X-sync shutter speed is set between 1/60 and 1/125 sec.

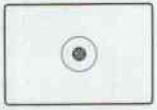
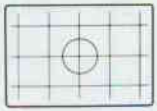


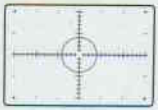
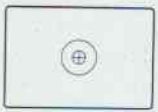
Please consult the Speedlite's instruction book for further details.

Use a Canon Speedlite with this camera. Using a flash (usually with more than two contacts) or flash accessory of another manufacturer may cause malfunction, or damage.

INTERCHANGEABLE FOCUSING SCREENS

The Overall New Laser-Matte/AF Frame screen comes with your camera. You can change the focusing screen according to specific focusing needs with six different focusing screens available optionally.

Type	Application
A. Microprism 	Matte field with microprism rangefinder spot in the center of the screen. Usable with all lenses. Especially suited for general photography using an aperture of f/5.6 or larger.
B. New Split	Matte field with split-image rangefinder spot in the center of the screen. Suitable for all lenses.
C. Overall New Laser Matte/AF Frame (standard)	Matte field with AF frame in the center of the screen. This screen enables the entire field of view to be seen without distraction. Usable with all lenses.
D. Laser Matte/Selection 	Matte field with vertical and horizontal reference lines. It is best for architectural photography, etc. where accurate image placement is essential.

H. Laser Matte/Scale		Matte field with vertical and horizontal scale in millimeters. Recommended for close-ups, etc. where it is useful to know the size of the subject or the magnification involved.
I. Laser Matte/Double Cross-hair Reticle		Matte field with clear center spot containing double cross-hair reticle. While focusing, move your eye from left to right. If cross-hairs stay in the same position on the subject, the subject is in focus. Recommended for astrophotography or other high magnification.
L. Cross Split-image		Matte field with cross split-image in the center of the screen which divides the subject in half both vertically and horizontally. The subject is in focus when the four quarters merge to become one unbroken image. Suitable for general photography using an aperture of f/5.6 or larger.

DIOPTRIC ADJUSTMENT LENSES

Ten eyesight correction lenses are available in powers of +3, +2, +1.5, +1, +0.5, 0, −0.5, −2, −3 and −4 diopters. They make viewing and focusing easier if you are near or far-sighted.

- The dioptric adjustment lens consists of a correction lens and removable rubber frame (eyecup).

CAMERA CASES

Thread the ends of the neckstrap through the rings on the camera as shown. When carrying the camera on your shoulder, keep the lens facing your body to minimize the risk of damage.

Keep the camera in a case to protect it while carrying.

Semi-hard case EH-1S

Semi-hard case EH-1L

Semi-hard case EH-1LL

Canon offers three semi-hard cases.

1. Semi-hard case EH-1S stores the camera with the EF 50 mm f/1.8 lens.
2. Semi-hard case EH-1L stores the camera with the EF 35–70 mm f/3.5–4.5 lens.
3. Semi-hard case EH-1LL stores the camera with the EF 28–70 mm f/3.5–4.5 lens and the EF 35–105 mm f/3.5–4.5 lens.

PRECAUTIONS

1) This camera is **not** resistant to water, and should not be used outdoors if snowing. If accidentally dropped in water, contact an authorized Canon Service Facility. Keep the camera out of salt spray, and protect it from excessive humidity. If used at the beach, clean it thoroughly afterward with a dry cloth.
2) Do not attempt to disassemble the camera yourself. Always take it to an authorized Canon Service Facility for repair.
3) Remove the battery if you do not expect to use the camera for about three weeks or longer.
4) When storing the camera, wrap it in a clean, soft cloth and place in a cool, dry, dustfree place. Be sure to keep the camera out of direct sunlight, and away from "hot spots" such as the trunk or rear window shelf of a car. Avoid places where moth balls are used, and in excessive humidity, use a desiccant.
5) Carefully check operation after prolonged storage.
6) The battery may explode or cause burns if disassembled, recharged, shorted, exposed to high temperatures, or disposed in fire.
7) Film passing through X-ray examinations at airports may be exposed and ruined even when loaded in the camera. Request a hand-checked inspection to avoid damage.
8) Aerosol spray dust removers are not recommended for the shutter curtain area.

1. Liquid Crystal Display

After about five years, the display may become hard to read.
The liquid crystal may respond relatively slow in low temperatures about 0° C/32° F and the display may become dark in high temperatures about 60° C/140° F.

Take your camera to the nearest Canon Service Facility for the replacement of the liquid crystal.

2. Blinking "bc" Display

A "bc" appearing with battery check bar marks may blink in the display panel to warn you of battery replacement or camera malfunction. Perform the following operations:

1) Check the battery first.
2 If battery voltage is insufficient, replace the battery.
3 If battery voltage is sufficient, remove the battery from the battery chamber and reinstall it.
4) Release the shutter
   If the blinking "bc" disappears, the camera has returned to normal condition and you can keep shooting. If it does not disappear after repeating these operations several times, the camera needs repair.

3. Lithium Battery Pack (1)

Try to make a habit of checking the battery at the following times:

- After loading a new battery.
- After prolonged storage.
- If the shutter will not release.
- Shooting in low temperatures.
- Before shooting important events.

1) Wipe the battery terminals and the camera contacts with a clean, dry cloth before loading to ensure proper contact.
2) Remove the battery if you do not expect to use the camera for about three weeks or longer.
3) Battery performance deteriorates slightly in temperatures below 0° C/32° F. Keep the camera and a spare battery pack close to your body or in a pocket to keep them warm until you are ready.

Battery may explode or cause burns if disassembled, recharged, shorted, or exposed to high temperature or disposed in fire. Be sure to observe all precautions indicated on the battery package.

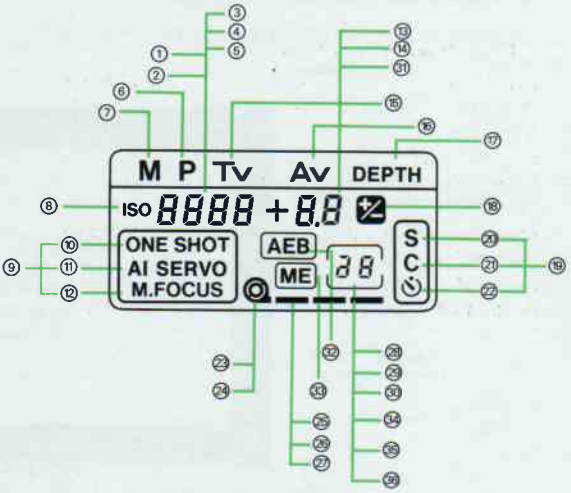
4. Lithium Battery Pack (2)

Even if one blinking bar mark or no bar mark appears in the display panel during battery check, exposure will be correct as long as the shutter releases. Automatic wind and rewind, however, may not be possible because of insufficient battery power.

Also, if the camera stops during wind or rewind all the film transport bars start blinking to warn you. Automatic rewind re-starts after new battery pack replacement and pressing the film rewind button.

1. LCD Display Panel

This camera uses a liquid crystal to display shooting information. The diagram below shows all the information for explanation purposes only. The display actually never looks like this. It shows only the information required at the time.

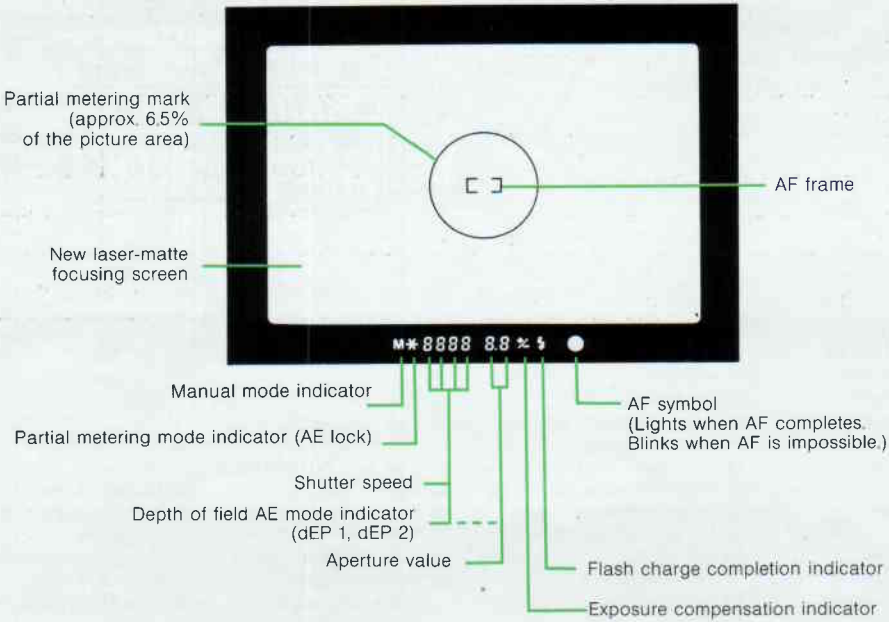


① Battery check
② Depth of field AE
③ ISO film speed
④ Shutter speed
⑤ Metered manual exposure level
⑥ Program AE
⑦ Manual
⑧ ISO indicator
⑨ AF mode
⑩ One-shot AF
⑪ AI Servo AF
⑫ Manual focusing
⑬ Aperture value
⑭ Exposure compensation value
⑮ Shutter-priority AE
⑯ Aperture-priority AE
⑰ Depth of field AE
⑱ Exposure compensation
⑲ Film winding mode
⑳ Single exposure
㉑ Continuous exposure
㉒ Self-timer
㉓ Film-load check
㉔ Film rewind completion
㉕ Film transport (wind/rewind)
㉖ Film wind completion
㉗ Battery check
㉘ Frame counter
㉙ Self-timer countdown
㉚ Bulb exposure time
㉛ Auto exposure bracketing value
㉜ Auto exposure bracketing
㉝ Multiple exposures
㉞ Number of multiple exposures
㉟ Programmed Image Control Number
㊱ Custom function control

2. Viewfinder Information Display

diagram here shows all the information for explanation.

The bright and easy-to-read viewfinder displays only necessary information at the bottom. The


Partial metering mark (approx. 6.5% of the picture area)
New laser-matte focusing screen
AF frame
Manual mode indicator
Partial metering mode indicator (AE lock)
Shutter speed
Depth of field AE mode indicator (dEP 1, dEP 2)
Aperture value
AF symbol (Lights when AF completes. Blinks when AF is impossible.)
Flash charge completion indicator
Exposure compensation indicator

3. Table of Programmed Image Control Combination

		AF mode		Film wind mode		Metering	
		ONE SHOT	AI SERVO	Single	Continuous	Evaluative	Partial
1. Standard		•		•		•	
2. Quick-shots			•		•	•	
3. Landscapes		•		•		•	
4. Sports			•		•	•	
5. Portraits		•			•	•	
6. Close-ups		•		•			•
7. Indoor	with Flash	•		•		TTL Program	

4. Comparisons between AF Mode and Film Winding Mode

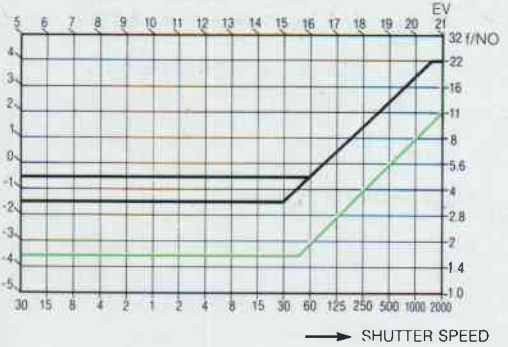
AF mode / Film winding mode	ONE SHOT	AI SERVO
S: single	AF lock and AE lock in the evaluative metering mode take place simultaneously when AF completes.	AF follows a subject and the exposure is determined at the moment of shutter release.
C: continuous	AF lock and AE lock in the evaluative metering mode take place simultaneously when AF completes, then continuous exposure is made. (Approx. 5 frames/sec. at the maximum.)	AF follows a subject and the exposure is determined at the moment of shutter release. AF is adjusted to follow the subject during exposure. (Approx. 2.5 frames/sec. at the maximum.)

CONTINUOUS + ONE SHOT = The aperture remains stopped down.

CONTINUOUS + AI SERVO = The aperture always restores to full-aperture before each exposure.

5. Program Line (program characteristics)

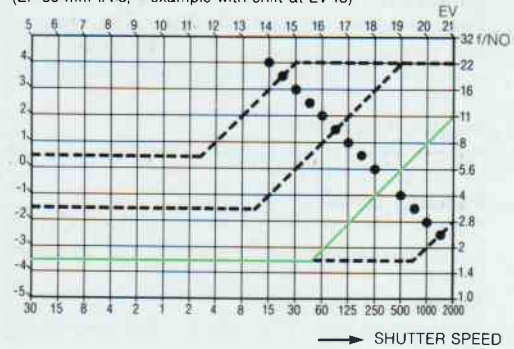
This camera is equipped with the advanced "Intelligent Program AE" which chooses the best shutter speed/aperture combinations, taking the lens focal length into account. When the automatically-set shutter speed becomes 0 to 0.5 steps below 1/focal length of the lens in use, the camera-shake warning sounds. The shutter speed of 1/focal length of the lens is generally said to be the limit for hand-held shooting.



Green: When using the EF 50 mm f/1.8
Black: When using the EF 35–70 mm f/3.5–4.5

Program shift characteristics

(EF 50 mm f/1.8, – example with shift at EV 13)



• Indicates the shutter/aperture combinations in program shift function.

SPECIFICATIONS

Type:
35 mm autofocus, single-lens reflex camera with electronically-controlled automatic exposure, focal plane shutter, and built-in motor drive.
Format: 24 mm × 36 mm.
Standard Lens: EF 50 mm f/1.8.
Lens Mount:
Canon EF Mount (fully electronic signal transfer system).
Viewfinder:
Fixed eye-level pentaprism. Gives 94% vertical and horizontal coverage of actual picture area, and 0.8X magnification at infinity with a standard 50 mm lens.
Dioptric Adjustment:
Built-in eyepiece is adjusted to standard –1 diopter (eyepoint: 19.3 mm).
Focusing Screen:
Overall new laser-matte/AF frame (type C). Six types of interchangeable screens are available optionally.
Mirror:
Quick-return half-mirror with shock and noise absorber.

Viewfinder Information:
Displayed at the bottom of the viewing area.
(1) 7-segment LCD digit and character display.
1. Shutter speed-flashes at 2 Hz to give out-of-coupling range warning.
2. Aperture value-flashes at 2 Hz to give out-of-coupling range warning.
3. Metered manual exposure level-OP, oo, CL.
4. Depth of field AE-dEP 1, dEP 2.

(2) LCD mask character display.
1. ✳ – AE lock indicator in partial metering mode.
2. M – Manual exposure indicator.
3. ϟ – flash charge completion indicator.
4. +/– – exposure compensation indicator.
5. • – AF in-focus indicator (flashes at 6 Hz when AF ist not possible).

Light Metering System:
TTL full aperture metering using SPC. Two selectable metering patterns: evaluative metering and partial metering (approx. 6.5% of the picture area). Stopped-down metering is not possible.

Shooting Modes:

1. Green mark standard Shooting mode with P.I.C. (Programmed Image Control).
2. Shutter-Priority AE.
3. Aperture-Priority AE.
4. Intelligent Program AE with variable shift function.
5. Depth of Field AE.
6. Manual.
7. Flash AE (A-TTL program flash AE and TTL program flash AE with specified Canon Speedlites).

Camera-shake Warning:

Operates for program AE, aperture-priority AE, and depth of field AE modes.

When automatically set shutter speed falls 0 to 0.5 steps below 1/focal length of the lens in use, the electronic beeper sounds. Beeper can also be cancelled.

Metering Range:

EV 1–20 (EV –1 to 20 in normal temperature) conversion with 50 mm f/1.4 at ISO 100.

Film Speed:

ISO 25–5000 is automatically set by 1/3 step according to DX code standard. ISO 6–6400 can also be set manually.

Exposure Compensation:

±5 steps by 1/2-step increment.

Auto Exposure Bracketing:

±5 steps in 1/2-step increments. Three continuous exposures are taken in sequence of underexposure, correct exposure according to camera's meter and overexposure.

Multiple Exposures:

Presetting up to nine exposures is possible. Automatically cleared upon completion.

AF Control System:
TTL-SIR (TTL secondary imaged registration) phase-detection type using BASIS (base-stored image sensor). AF operation starts when the shutter button is pressed halfway. AF in-focus indicator lights upon ranging completion. Three selectable modes:

1. ONE SHOT: AF operation ends and focus is locked once ranging is completed. Shutter does not release until ranging is completed.
2. AI SERVO: Focus continuously adjusts to follow the subject movement. Shutter can be released at any time regardless of ranging completion.
3. MANUAL: By rotating the manual focusing ring after focus mode switch is set to "M".

AF Working Range: EV 1–18 at ISO 100.

AF Auxiliary Light:
The near infrared light (peak sensitivity: 700 nm) is automatically projected with specified Canon Speedlites.

Shutter:
Vertical-travel focal plane shutter with soft-touch electromagnetic release. All speeds electronically controlled.

Shutter Speed:
1/2000–30 sec. and bulb. X-sync is 1/125 sec. Can be set in 1/2-step increments.

Self-timer:
Electronically controlled with a delay of approx. 10 sec. indicated by blinking LED operation confirmation lamp.

Film Loading:
After film positioning and back cover closure, the film automatically advances to the first usable frame and then stops (approx. 1.0 sec.).

Film Wind:
Automatic using the built-in miniature motor. Confirmation by the film transport bar marks in the display panel.

Film Winding Mode:
Two selectable modes; S (single exposure) and C (continuous exposure at the maximum speed of approx. 5 frames/sec. with ONE SHOT AF mode and approx. 2.5 frames/sec. with AI SERVO AF mode).

Film Rewind:
Automatic using the built-in miniature motor. Starts when the film end is reached and then stops (with 24-exp. film, approx. 6 sec.). Mid-roll rewind performed by pressing the film rewind button.

Flash Contact:
Coupled directly to the camera by X-sync contact on the accessory shoe.

Automatic Flash (using the Speedlite 420EZ/ 300EZ with the camera set to "P"):
A-TTL flash auto-Using the camera's A-TTL program and the flash's near-infrared preflash, the correct aperture value is automatically set. X-sync speed is also automatically set between 1/60 and 1/125 sec. upon flash charge completion. TTL control system which meters the light reflected from the film surface. Automatic fill-in flash is possible.

Grip:
Interchangeable.
The GR30 (without remote control terminal): standard.
The GR20 (with remote control terminal): available optionally.
The large-size, Grip GR10 is available optionally.

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